Amendments to the Specification:

Please replace the paragraph beginning at line 25 of page 12, which the following amended paragraph:

Once the desired class of biopolymer has been isolated the biopolymer class can be separated into parent polymer molecules having a range of physical characteristics. In a preferred embodiment of the present invention, the isolated parent polymer can be further fragmented. For example, an isolated protein or a polypeptide from an activated T-cell can be isolated and separated by molecular weight and/or isoelectric point using two dimensional electrophoresis. This separation results in a number of spots on the second dimension gel comprising proteins and polypeptides which have approximately the same molecular weight and have approximately the same isoelectric point. The parent proteins and polypeptides present in a spot can be further fragmented by admixing a chemical, such as, for example, cyanogen bromide, or a protease, including, for example, trypsin, chymotrypsin, or papain, with an excised gel spot. Enzyme digestion results in a number of peptides for each parent polymer. Each particular protein or polypeptide within a spot will have a specific particular enzyme fragment pool or "fingerprint" product produced within the desired time period the rate of synthesis is determined.

Please replace the paragraph beginning at line 4 of page 13 with the following amended paragraph:

Fragmentation of other biopolymers, for example DNA or RNA, can be accomplished by cleavage using a restriction enzyme or mechanical means. Complex carbohydrates can be fragmented by chemical means or by means of an enzyme. Lipids can be fragmented by chemical means or by means of an enzyme, including for example, a lipase. Once the biopolymer has been fragmented, the various fragments can be separated by means well known in the art. These methods include, but are not limited to, gel filtration, electrophoresis, affinity

chromatography, and the like. The abundance of monoisotopic and isotopomeric peaks can then be determined for each fragment of biopolymer label and associated with the particular cell or tissue from which it was isolated.